

## **RAW SEQUENCE LISTING**

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Information Center (STIC) no errors detected.**

Application Serial Number: 10/550, 673  
Source: PCT  
Date Processed by STIC: 10/07/2005

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PCT

## RAW SEQUENCE LISTING

DATE: 10/07/2005

PATENT APPLICATION: US/10/550,673

TIME: 09:27:02

Input Set : A:\SEQUENCE LISTING.ST25.txt

Output Set: N:\CRF4\10072005\J550673.raw

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3 <110> APPLICANT: Washington University in St. Louis
4   Bao, Jianxin
6 <120> TITLE OF INVENTION: NEUREGULIN PROTEIN REGULATION OF SYNAPTIC PROTEINS
8 <130> FILE REFERENCE: 104916
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/550,673
C--> 10 <141> CURRENT FILING DATE: 2005-09-26
10 <160> NUMBER OF SEQ ID NOS: 41
12 <170> SOFTWARE: PatentIn version 3.3
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 373
16 <212> TYPE: PRT
17 <213> ORGANISM: Homo sapiens
19 <400> SEQUENCE: 1
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22 1      5      10      15
25 Leu Arg Ser Glu Arg Asn Asn Val Met Asn Met Ala Asn Gly Pro His
26      20      25      30
29 His Pro Asn Pro Pro Pro Asp Asn Val Gln Leu Val Asn Gln Tyr Val
30      35      40      45
33 Ser Lys Asn Ile Ile Ser Ser Glu Arg Val Val Glu Arg Glu Thr Glu
34      50      55      60
37 Thr Ser Phe Ser Thr Ser His Tyr Thr Ser Thr Thr His His Ser Met
38 65      70      75      80
41 Thr Val Thr Gln Thr Pro Ser His Ser Trp Ser Asn Gly His Thr Glu
42      85      90      95
45 Ser Ile Leu Ser Glu Ser His Ser Val Leu Val Ser Ser Ser Val Glu
46      100     105     110
49 Asn Ser Arg His Thr Ser Pro Thr Gly Pro Arg Gly Arg Leu Asn Gly
50      115     120     125
53 Ile Gly Gly Pro Arg Glu Gly Asn Ser Phe Leu Arg His Ala Arg Glu
54      130     135     140
57 Thr Pro Asp Ser Tyr Arg Asp Ser Pro His Ser Glu Arg Tyr Val Ser
58 145     150     155     160
61 Ala Met Thr Thr Pro Ala Arg Met Ser Pro Val Asp Phe His Thr Pro
62      165     170     175
65 Thr Ser Pro Lys Ser Pro Pro Ser Glu Met Ser Pro Pro Val Ser Ser
66      180     185     190
69 Leu Thr Ile Ser Ile Pro Ser Val Ala Val Ser Pro Phe Met Asp Glu
70      195     200     205
73 Glu Arg Pro Leu Leu Leu Val Thr Pro Pro Arg Leu Arg Glu Lys Tyr
74      210     215     220
77 Asp Asn His Leu Gln Gln Phe Asn Ser Phe His Asn Asn Pro Thr His
78 225     230     235     240

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81 Glu Ser Asn Ser Leu Pro Pro Ser Pro Leu Arg Ile Val Glu Asp Glu
82                245                250                255
85 Glu Tyr Glu Thr Thr Gln Glu Tyr Glu Pro Ala Gln Glu Pro Pro Lys
86                260                265                270
89 Lys Leu Thr Asn Ser Arg Arg Val Lys Arg Thr Lys Pro Asn Gly His
90                275                280                285
93 Ile Ser Ser Arg Val Glu Val Asp Ser Asp Thr Ser Ser Gln Ser Thr
94                290                295                300
97 Ser Ser Glu Ser Glu Thr Glu Asp Glu Arg Thr Gly Glu Asp Thr Pro
98 305                310                315                320
101 Phe Leu Ser Ile Gln Asn Pro Met Ala Thr Ser Leu Glu Pro Ala Ala
102                325                330                335
105 Ala Tyr Arg Leu Ala Glu Asn Arg Thr Asn Pro Ala Asn Arg Phe Ser
106                340                345                350
109 Thr Pro Glu Glu Leu Gln Ala Arg Leu Ser Ser Val Ile Ala Asn Gln
110                355                360                365
113 Asp Pro Ile Ala Val
114                370
117 <210> SEQ ID NO: 2
118 <211> LENGTH: 3272
119 <212> TYPE: DNA
120 <213> ORGANISM: Homo sapiens
122 <400> SEQUENCE: 2
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127 ggacccggga cactagagca gctccgagcc actccagact gagcggacgc tccaggtgat      180
129 cgagtccacg ctgcttcctg caggcgacag gcgacgcctc ccgagcagcc cggccactgg      240
131 ctcttccctt cctgggacaa acttttctgc aagcccttgg accaaacttg tcgcgcgtca      300
133 ccgtcaccca accgggtccg cgtagagcgc tcatcttcgg cgagatgtct gagcgcaaag      360
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137 ccgccgaggg cgacccgagc ccagcactgc ctcccagatt gaaagaaatg aagagccagg      480
139 agtcagctgc aggtctcaag ctagtgtctc ggtgcgaaac cagctccgag tactcctcac      540
141 tcagattcaa atggttcaag aatgggaacg agctgaaccg caaaaataaa ccagaaaaca      600
143 tcaagataca gaagaagcca gggaagtcag agcttcgaat taacaaagca tccctggctg      660
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159 tctgtatcgc cctgctgggt gtcggcatca tgtgtgtggt ggcctactgc aaaaccaaga     1140
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169 agactcctag tcacagctgg agtaatgggc acacggagag cgtcatttca gaaagcaact     1440
171 ccgtaatcat gatgtcttcg gtagagaaca gcaggcacag cagtcccgcc gggggccac     1500
173 gaggacgtct tcatggcctg ggaggccctc gtgataacag cttcctcagg catgccagag     1560

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175 aaaccctga ctcctacaga gactctcctc atagcgaaag gtatgtatca gccatgacca 1620
177 ccccggtcg tatgtcacct gtagatttcc acacgccaag ctcccctaaa tcgccccctt 1680
179 cggaaatgtc tccaccctgt tccagcatga cgggtgccat gccctctgtg gcagtcagcc 1740
181 cctttgtgga agaagagagg cctctgctgc ttgtgacgcc accaaggcta cgggagaaga 1800
183 aatatgatca tcacccccag caactcaact cctttcatca caaccctgca catcagagta 1860
185 ccagcctccc ccctagccca ctgaggatag tggaggatga ggagtacgag acgacccagg 1920
187 agtatgagtc agttcaagag cccgttaaga aagtcaccaa tagccggcgg gccaaaagaa 1980
189 ccaagcccaa tggccacatt gccaataggt tggaaatgga cagcaacaca agttctgtga 2040
191 gcagtaatc agaaagtga acagaagacg aaagagtagg tgaagacaca ccattcctgg 2100
193 gcatacagaa cccctggca gccagccttg aggtggcccc tgccttccgt ctggctgaga 2160
195 gcaggactaa ccagcaggc cgcttctcca cacaggagga attacaggcc aggtgtgcta 2220
197 gtgtaatcgc taaccaagac cctattgtcg tataaaacct aaataaacac atagattcac 2280
199 ctgtaaaact ttattttata taataaagta ttacacctta aattaaacaa tttattttat 2340
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203 gtatgtaaaa atgtgttatg tgccatatgt agcaattttt ttacagtatt tcaaaaacga 2460
205 gaaagatata aatggtgcct ttatgttctg ttatgtcgag agcaagtttt ataaagtatt 2520
207 ggtgatttct ttttcacagt atttcagcaa aacctcccat atattcagtt tctgctggct 2580
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211 cgtgttctct ctctctctct ctctctctct ctctctgtct ctctctctgt ctctctctct 2700
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215 cccgtagctc ccaaccagta ctgtcttgga ctggcacatc catccaaata ctttctact 2820
217 ttgtatgaag ttttctttgc tttcccaata tgaaatgagt tctctctact ctgtcagcca 2880
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223 aaaaaaaaaa caaactatat tattaatcag aagacagctt gctcttggtg aaaggagcta 3060
225 ccattgactc taattttgac tttttagtta ttgttcttga caaagagtaa cagcttcaag 3120
227 tacagcctag aaaaaaaaaa gggttctggc ctgctatcag gataaatcta tcgacgtaga 3180
229 tagattcaac tcagtttcac tttctgtctt gggggaaatg atccagccac tcatatgacg 3240
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234 &lt;210&gt; SEQ ID NO: 3

235 &lt;211&gt; LENGTH: 8

236 &lt;212&gt; TYPE: PRT

237 &lt;213&gt; ORGANISM: Homo sapiens

239 &lt;400&gt; SEQUENCE: 3

241 Lys Thr Lys Lys Gln Arg Lys Lys

242 1 5

245 &lt;210&gt; SEQ ID NO: 4

246 &lt;211&gt; LENGTH: 7

247 &lt;212&gt; TYPE: PRT

248 &lt;213&gt; ORGANISM: Homo sapiens

250 &lt;400&gt; SEQUENCE: 4

252 Pro Arg Leu Arg Glu Lys Lys

253 1 5

256 &lt;210&gt; SEQ ID NO: 5

257 &lt;211&gt; LENGTH: 48

258 &lt;212&gt; TYPE: PRT

259 &lt;213&gt; ORGANISM: Homo sapiens

261 &lt;400&gt; SEQUENCE: 5

263 Lys Thr Lys Lys Gln Arg Lys Lys Leu His Asp Arg Leu Arg Gln Ser

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264 1          5          10          15
267 Leu Arg Ser Glu Arg Asn Asn Val Met Asn Met Ala Asn Gly Pro His
268          20          25          30
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272          35          40          45
275 <210> SEQ ID NO: 6
276 <211> LENGTH: 219
277 <212> TYPE: PRT
278 <213> ORGANISM: Homo sapiens
280 <400> SEQUENCE: 6
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286 Val Asp Phe His Thr Pro Thr Ser Pro Lys Ser Pro Pro Ser Glu Met
287          20          25          30
290 Ser Pro Pro Val Ser Ser Leu Thr Ile Ser Ile Pro Ser Val Ala Val
291          35          40          45
294 Ser Pro Phe Met Asp Glu Glu Arg Pro Leu Leu Leu Val Thr Pro Pro
295          50          55          60
298 Arg Leu Arg Glu Lys Tyr Asp Asn His Leu Gln Gln Phe Asn Ser Phe
299 65          70          75          80
302 His Asn Asn Pro Thr His Glu Ser Asn Ser Leu Pro Pro Ser Pro Leu
303          85          90          95
306 Arg Ile Val Glu Asp Glu Glu Tyr Glu Thr Thr Gln Glu Tyr Glu Pro
307          100         105         110
310 Ala Gln Glu Pro Pro Lys Lys Leu Thr Asn Ser Arg Arg Val Lys Arg
311          115         120         125
314 Thr Lys Pro Asn Gly His Ile Ser Ser Arg Val Glu Val Asp Ser Asp
315          130         135         140
318 Thr Ser Ser Gln Ser Thr Ser Ser Glu Ser Glu Thr Glu Asp Glu Arg
319 145          150         155         160
322 Thr Gly Glu Asp Thr Pro Phe Leu Ser Ile Gln Asn Pro Met Ala Thr
323          165         170         175
326 Ser Leu Glu Pro Ala Ala Ala Tyr Arg Leu Ala Glu Asn Arg Thr Asn
327          180         185         190
330 Pro Ala Asn Arg Phe Ser Thr Pro Glu Glu Leu Gln Ala Arg Leu Ser
331          195         200         205
334 Ser Val Ile Ala Asn Gln Asp Pro Ile Ala Val
335          210         215
338 <210> SEQ ID NO: 7
339 <211> LENGTH: 116
340 <212> TYPE: PRT
341 <213> ORGANISM: Homo sapiens
343 <400> SEQUENCE: 7
345 Leu Lys Cys Asp Val Cys Gly Met Val Cys Ile Gly Pro Asn Val Leu
346 1          5          10          15
349 Met Val His Lys Arg Ser His Thr Gly Glu Arg Pro Phe His Cys Asn
350          20          25          30
353 Gln Cys Gly Ala Ser Phe Thr Gln Lys Gly Asn Leu Leu Arg His Ile
354          35          40          45

```

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Input Set : A:\SEQUENCE LISTING.ST25.txt

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357 Lys Leu His Ser Gly Glu Lys Pro Phe Lys Cys Pro Phe Cys Asn Tyr
358      50                      55                      60
361 Ala Cys Arg Arg Arg Asp Ala Leu Thr Gly His Leu Arg Thr His Ser
362 65                      70                      75                      80
365 Val Ser Ser Pro Thr Val Gly Lys Pro Tyr Lys Cys Asn Tyr Cys Gly
366                      85                      90                      95
369 Arg Ser Tyr Lys Gln Gln Ser Thr Leu Glu Glu His Lys Glu Arg Cys
370                      100                      105                      110
373 His Asn Tyr Leu
374      115
377 <210> SEQ ID NO: 8
378 <211> LENGTH: 54
379 <212> TYPE: PRT
380 <213> ORGANISM: Homo sapiens
382 <400> SEQUENCE: 8
384 Cys Glu His Cys Arg Ile Leu Phe Leu Asp His Val Met Phe Thr Ile
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388 His Met Gly Cys His Gly Phe Arg Asp Pro Phe Glu Cys Asn Ile Cys
389      20                      25                      30
392 Gly Tyr His Ser Gln Asp Arg Tyr Glu Phe Ser Ser His Ile Val Arg
393      35                      40                      45
396 Gly Glu His Lys Val Gly
397      50
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401 <211> LENGTH: 65
402 <212> TYPE: PRT
403 <213> ORGANISM: Homo sapiens
405 <400> SEQUENCE: 9
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408 1                      5                      10                      15
411 Ile Leu Phe Leu Asp His Val Met Phe Thr Ile His Met Gly Cys His
412      20                      25                      30
415 Gly Phe Arg Asp Pro Phe Glu Cys Asn Ile Cys Gly Tyr His Ser Gln
416      35                      40                      45
419 Asp Arg Tyr Glu Phe Ser Ser His Ile Val Arg Gly Glu His Lys Val
420      50                      55                      60
423 Gly
424 65
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428 <211> LENGTH: 70
429 <212> TYPE: PRT
430 <213> ORGANISM: Homo sapiens
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438 Cys Glu His Cys Arg Ile Leu Phe Leu Asp His Val Met Phe Thr Ile
439      20                      25                      30
442 His Met Gly Cys His Gly Phe Arg Asp Pro Phe Glu Cys Asn Ile Cys
443      35                      40                      45

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VERIFICATION SUMMARY

DATE: 10/07/2005

PATENT APPLICATION: US/10/550,673

TIME: 09:27:03

Input Set : A:\SEQUENCE LISTING.ST25.txt

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L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date